RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
						03201
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 7

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
*		NOTE: Items marked with an * are only required on the functional check.
*		Check type of inspection — General Inspection ☐ Functional Check ☐
		Reference TI 4158.1-25-36
		1. General raft inspection.
		CAUTION: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING RAFT WITH AIR.
		* Using a source of low pressure, clean, dry air, inflate both flotation chambers to approximately 1.0 psig. Introduce air through the manual inflation valves.
		Visually inspect raft for the following:
M		a. Raft fabric for tears, cuts, punctures, deterioration, and abrasions.
M		b. Seam tapes for proper adhesion.
M		c. Raft floor for wear, tears, punctures, deterioration, and abrasions.
M		d. All patches for proper adhesion.
M		e. Pockets for tears, abrasions, and security of attachment.
M		f. Sea anchor for wear, tears, and general condition. Sea anchor mooring line for condition.
M		g. Boarding aids for deterioration and security of attachment.
M		h. All lines for condition and security of attachment.

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
M		i. Manual inflation valves for deterioration or other damage. Ensure plugs fit valves are securely attached to valves.
_____	_____	_____
M		j. All hardware for corrosion, damage, security of attachment, and, if applicable, ease of operation.
_____	_____	_____
M		k. Markings for legibility. Remark as required.
_____	_____	_____
M		l. Turn raft over and repeat steps 1a thru k.
		2. Carrying case and equipment container inspection.
M		a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. Ensure all markings are legible.
_____	_____	_____
M		b. Inspect handles, loops, and straps for general condition and security of attachment.
_____	_____	_____
M		c. Inspect all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
		3. Emergency equipment and accessories inspection. Make a physical inventory of accessories and emergency equipment. Ensure all required items are accounted for and are in serviceable condition.
		a. Perform operational check on rescue locator beacon. Perform check in accordance with decal attached to the transmitter.
M		(1) Check battery expiration date. The battery will be replaced every 2 years.
_____	_____	_____
M		(2) Record battery expiration date: _____.
_____	_____	_____
M		(3) Record transmitter S/N: _____.
_____	_____	_____
		b. Hand pump and adapter.

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
M		(1) Operate pump and ensure it delivers air.
M		(2) Close pump outlet and check piston seal.
M		(3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.
M		c. Check raft repair kit for completeness. Replace missing items.
M		d. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition.
M		e. Inspect Survivor 06 Watermaker Kit for damage and condition. Clean as required per attached instructions or TI 4158.1-25-39.
M		f. Repack accessory items and secure accessory container to life raft.
		g. Check ARCL8-1 locator light and battery (2 each) as follows:
M		(1) Check battery cell unit for swelling. Cell case thickness shall not exceed 7/16 inch.
M		(2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights.
M		(3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____
M		(4) Look into water access holes and check for encrustation. Replace batteries which show signs of encrustation.
M		(5) Reassemble lamp electrical cord to battery cell unit.
M		(6) Repeat steps 3g (1) thru (5) for second locator light assembly. Accept: _____ Reject: _____

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
		4. Testing. NOTE: All rafts over 5 years old shall be proof tested.
M		a. Proof test (if required). **WARNING**: ALL PERSONNEL MUST BE AT LEAST 20 FEET AWAY FROM RAFT DURING THIS TEST. DO NOT LEAK CHECK DURING THIS TEST. Inflate the buoyancy tubes to 4.0 psi for 5 minutes. No seam separation or bursting of fabric is allowed.
_____	_____	_____
		* b. 24-hour leak test. **CAUTION:** ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING WITH AIR.
M		* (1) Using low pressure, oil-free air, inflate lower flotation tube to 2.0 psig. Introduce air through manual inflation valve.
_____	_____	_____
M		* (2) Inflate top flotation tube in the same manner to 2.0 psig through manual inflation valve.
_____	_____	_____
M		* (3) Inflate center float to 1.0 psig.
_____	_____	_____
M		* (4) It is advisable at this time to check unused manual inflation valves for leakage using soap and water solution. Any leakage must be corrected before proceeding.
_____	_____	_____
M		* (5) Allow assembly to stand for 1 hour. Record time: _____
_____	_____	_____
M	I	* (6) After 1 hour, check pressure in both tubes and center float. If necessary, adjust pressures to 2.0 psig in tubes and 1.0 psig in center float. Record time, date, ambient temperature, and barometric pressure on chart below.
_____	_____	_____
M		* (7) Allow raft to remain undisturbed for 24 hours, including the 1 hour adjustment time.
_____	_____	_____
M	I	* (8) After 24 hours, read and record raft pressure, ambient temperature, barometric pressure on chart and enter correction as follows:

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
		For each 0.1 inch of mercury, increase add 0.05 psi. For each 0.1 inch of mercury, decrease sub 0.05 psi. For each 1.0 deg F of temperature, decrease add 0.03 psi. For each 1.0 deg F of temperature, increase sub 0.03 psi.
		*TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE / TEMPERATURE / LEFT CELL / RIGHT CELL / FLOOR START _____ _____ _____ _____ _____ END _____ _____ _____ _____ _____ DIFF _____ (inc/dec) _____ (inc/dec) CORRECTION _____ (add/sub) _____ (add/sub) _____ _____ _____ ADJUST END PSI FOR ABOVE CORRECTION _____ _____ _____ NOTE: The life raft is considered satisfactory if the corrected pressure in each tube is not less than 1.5 psig and center float is not less than 0.5 psig. If the raft does not pass, locate leak(s) and repair. Retest raft after repairs are performed.
M		5. Inflation system inspection. **WARNING**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. NOTE: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date. a. Cylinder inspection. (1) Inspect cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement.

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
M		(2) Inspect cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders
M	I	(3) Weigh inflation assemblies. If weight is not the same as gross weight marked on cylinder, replace.
M	I	(4) Record cylinder serial numbers and hydro test date. CYL #1 S/N _____ HYDRO TEST DATE _____ CYL #2 S/N _____ HYDRO TEST DATE _____ **CAUTION**: ON REMOVAL OF A CO_2 CYLINDER VALVE (CHARGED OR NOT), INSTALL THE CO_2 OUTLET SAFETY DEFLECTOR.
		b. Valve assembly inspection.
M		(1) Inspect external surface of valve for evidence of corrosion, wear, loose screws, and dents.
M		(2) Check that green dot is visible thru window in cover.
		6. Assembling the life raft.
M		a. Ensure emergency equipment and accessories are at hand and have been inspected.
M		b. Attach accessories to raft loops from which removed.
M		c. Obtain properly charged inflation assemblies. Secure cylinders in cylinder covers.
M		d. Lace cylinders into raft cylinder holders. Attach cylinders to raft inlet valves. NOTE: Make sure that deflector is removed from the valve prior to installation.
M		e. Record inspection date on life raft.

MECH	INSP	SWITLIK 10 MAN MODEL NO. C-10-1 LIFE RAFT INSPECTION
M		* f. Using a vacuum source, completely deflate both flotation tubes and center float. Ensure unused manual inflation valves are closed.
_____	_____	_____
M		g. Powder raft liberally with talc or powdered soapstone.
_____	_____	_____
M		h. Fold raft per manufacturer's folding diagram (reference TI 4158.1-25-36) and secure raft in container. **WARNING**: ENSURE INFLATION SYSTEM GAS RELEASE CABLES ARE PROPERLY ATTACHED TO LANYARD/MOORING LINE. IF SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT.
M		7. Record inspection date on serviceable part tag and insert tag in plastic card holder on raft container.
	I	8. Inspect work order for completeness.
	I	9. Life raft inspection complete.

RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
						03202
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 7

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
*		NOTE: Items marked with an * are only required on the functional check.
*		Check type of inspection — General Inspection ☐ Functional Check ☐
		Reference TI 4158.1-25-32
		1. General raft inspection.
		CAUTION: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING RAFT WITH AIR.
		* Using a source of low pressure, clean, dry air, inflate both flotation chambers to approximately 1.0 psig. Introduce air through the manual inflation valves.
		Visually inspect raft for the following:
M		a. Raft fabric for tears, cuts, punctures, deterioration, and abrasions.
M		b. Seam tapes for proper adhesion.
M		c. Raft floor for wear, tears, punctures, deterioration, and abrasions.
M		d. All patches for proper adhesion.
M		e. Sea anchor for wear, tears, and general condition. Sea anchor mooring line for condition.
M		f. All lines for condition and security of attachment.
M		g. Manual inflation valves and pressure relief valves for deterioration or other damage.
M		h. All hardware for corrosion, damage, security of attachment, and, if applicable, ease of operation.

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
M		i. Markings for legibility. Remark as required.
		2. Carrying case and equipment container inspection.
M		a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. Ensure all markings are legible.
____	____	_____
M		b. Check handles, loops, and straps for general condition and security of attachment.
____	____	_____
M		c. Check all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
		3. Emergency equipment and accessories inspection. Make a physical inventory of accessories and emergency equipment. Ensure all required items are accounted for and are in serviceable condition.
		a. Perform operational check on rescue locator beacon. Perform check in accordance with decal attached to the transmitter.
M		(1) Check battery expiration date. The battery will be replaced every 2 years.
____	____	_____
M		(2) Record battery expiration date: _____.
____	____	_____
M		(3) Record transmitter S/N: _____.
____	____	_____
		b. Hand pump and adapter.
M		(1) Operate pump and ensure it delivers air.
____	____	_____
M		(2) Close pump outlet and check piston seal.
____	____	_____
M		(3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
M		c. Check raft repair kit for completeness. Replace missing items.
_____	_____	_____
M		d. Check canopy and canopy poles for condition.
_____	_____	_____
M		e. Inspect Survivor 06 Watermaker Kit for damage and condition. Clean as required per attached instructions or TI 4158.1-25-39.
_____	_____	_____
M	I	f. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition.
_____	_____	_____
M		g. Repack accessory items and secure accessory container to life raft.
_____	_____	_____
		h. Check ARCL8-1 locator light and battery as follows:
M		(1) Check battery cell unit for swelling. Cell case thickness shall not exceed 7/16 inch.
_____	_____	_____
M		(2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights.
_____	_____	_____
M		(3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____
_____	_____	_____
M		(4) Look into water access holes and check for encrustation. Replace batteries which show signs of encrustation.
_____	_____	_____
M		(5) Reassemble lamp electrical cord to battery cell unit.
		4. Leakage test. **<u>CAUTION</u>**: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING WITH AIR.
M	I	* a. Relief valve test. (Perform on rafts having relief valves.)

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
M	I	(1) Using low pressure air, inflate the left-hand flotation chamber slowly until the relief valve opens. Valve should open at no more than 3.0 psig. Allow pressure to bleed through relief valve until valve closes. Valve should be closed and leak tight at no less that 2.0 psig. Apply soap and water solution to relief valve to ascertain valve is leak tight. Open _____psig. Close _____psig.
M		* (2) Repeat inspection on right-hand flotation chamber. Open _____psig. Close _____psig. NOTE: Replace relief valves that do not pass this test.
		* b. 24-hour leak test.
M		* (1) Using low pressure, oil-free air, inflate left flotation chamber to 1.5 psig. Introduce air through manual inflation valves.
M		* (2) Inflate right flotation chamber in the same manner to 2.0 psig.
M		* (3) Check left chamber and top to 2.0 psig is necessary. Record time _____
M		* (4) After 1 hour, check pressure in both chambers. Adjust pressures to 2.0 psig if necessary. Record time, date, ambient temperature, and barometric pressure on chart below.
M		* (5) Allow raft to remain undisturbed for 24 hours, excluding the 1 hour adjustment time.
M	I	(6) After 24 hours, read and record raft pressure, ambient temperature, and barometric pressure on chart and enter correction as follows: For each 0.1 inch of mercury, increase add 0.05 psi. For each 0.1 inch of mercury, decrease sub 0.05 psi. For each 1.0 deg F of temperature, decrease add 0.03 psi. For each 1.0 deg F of temperature, increase sub 0.03 psi.

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
		*TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE / TEMPERATURE / LEFT CELL / RIGHT CELL START _____ _____ _____ _____ END _____ _____ _____ _____ DIFF _____ (inc/dec) _____ (inc/dec) CORRECTION _____ (add/sub) _____ (add/sub) _____ _____ ADJUST END PSI FOR ABOVE CORRECTION _____ _____ NOTE: The life raft is considered satisfactory if the corrected pressure in each chamber is not less than 1.5 psig. If the raft does not pass, locate leak(s) and repair. Retest raft after repairs are performed.
		5. Inflation system inspection. **WARNING**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. NOTE: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date. a. Cylinder inspection.
M		(1) Check cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement.
_____ M	_____	_____ (2) Check cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders
_____ M	_____ I	_____ (3) Weigh inflation assembly. If weight is not the same as gross weight marked on cylinder, replace.

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
M	I	(4) Record cylinder serial numbers and hydrostatic test date. S/N _____ HYDRO TEST DATE _____
_____	_____	_____
		b. Valve assembly inspection.
M		(1) Inspect external surface of valve for evidence of corrosion, wear, loose screws, and dents.
_____	_____	_____
M		(2) Check that green dot is visible thru window in cover (A128 valve only).
		6. Assembling the life raft.
M		a. Ensure emergency equipment and accessories are at hand and have been inspected.
_____	_____	_____
M		b. Attach accessories to raft loops from which removed.
_____	_____	_____
M		c. Obtain properly charged inflation assemblies. Secure cylinders in cylinder covers.
_____	_____	_____
M		d. Lace cylinders into raft cylinder holders. Attach cylinders to raft inlet valves. NOTE: Make sure that deflector is removed from the valve prior to installation.
_____	_____	_____
M		e. Record inspection date on life raft.
_____	_____	_____
M		* f. Using a vacuum source, completely deflate both flotation chambers.
_____	_____	_____
M		g. Powder raft liberally with talc or powdered soapstone.

MECH	INSP	EASTERN AERO MARINE MODEL NOS. T2, T4, T6 LIFE RAFT INSPECTION
M		h. Fold raft per manufacturer's folding diagram (reference TI 4158.1-25-32) and secure raft in container. **WARNING**: ENSURE FLOTATION SYSTEM ACTUATING LANYARDS ARE PROPERLY ATTACHED. IF INFLATION SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT.
M		7. Record inspection date on serviceable part tag and insert tag in plastic card holder on raft container.
	I	8. Inspect work order for completeness.
	I	9. Life raft inspection complete.

RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
						03204
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 7

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
*		NOTE: Items marked with an * are only required on the functional check.
*		Check type of inspection — General Inspection ☐ Functional Check ☐
		Reference TI 4158.1-25-31
		1. General raft inspection.
		CAUTION: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING RAFT WITH AIR.
		* Using a source of low pressure, clean, dry air, inflate both flotation tubes and the inflatable floor to approximately 1.0 psig. Introduce air through the manual inflation valves.
		Visually inspect raft for the following:
M		a. Raft fabric for tears, cuts, punctures, deterioration, and abrasions.
M		b. Seam tapes for proper adhesion.
M		c. Raft floor for wear, tears, punctures, deterioration, and abrasions.
M		d. Where applicable, black painted surfaces for fading, chipping, or scaling.
M		e. All patches for proper adhesion.
M		f. Pockets for tears, abrasions, and security of attachment.
M		g. Boarding stirrups for wear, deterioration, and security of attachment.

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
M		h. Sea anchor for wear, tears, and general condition. Sea anchor mooring line for condition
M		i. Heaving line for condition and security of attachment.
M		j. Righting line for condition and security of attachment.
M		k. Manual inflation valves and pressure relief valves for deterioration or other damage.
M		l. All hardware for corrosion, damage, security of attachment, and, if applicable, ease of operation.
M		m. Canopy for cuts, tears, punctures, abrasions, and general cleanliness.
M		n. Markings for legibility. Remark as required.
M		2. Carrying case and equipment container inspection. a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. Ensure all markings are legible.
M		b. Inspect handles, loops, and straps for general condition and security of attachment.
M		c. Inspect all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
		3. Emergency equipment and accessories inspection. Make a physical inventory of accessories and emergency equipment. Ensure all required items are accounted for and are in serviceable condition. a. Perform operational check on rescue locator beacon. Perform check in accordance with decal attached to the transmitter.

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
M		(1) Check battery expiration date. The battery will be replaced every 2 years.
_____	_____	_____
M		(2) Record battery expiration date: _____.
_____	_____	_____
M		(3) Record transmitter S/N: _____.
_____	_____	_____
		b. Hand pump and adapter.
M		(1) Operate pump and ensure it delivers air.
_____	_____	_____
M		(2) Close pump outlet and check piston seal.
_____	_____	_____
M		(3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.
_____	_____	_____
M		c. Check raft repair kit for completeness. Replace missing items.
_____	_____	_____
M		d. Inspect Survivor 06 Watermaker Kit for damage and condition. Clean as required per attached instructions or TI 4158.1-25-39.
_____	_____	_____
M	I	e. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition.
_____	_____	_____
M		f. Repack accessory items and secure accessory container to life raft.
_____	_____	_____
		g. Check locator light and battery as follows:
M		(1) Check battery cell unit for swelling. Cell case thickness shall not exceed .580 inch.
_____	_____	_____
M		(2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights.

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
M		(3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____
_____	_____	_____
M		(4) Look into water access holes and check for encrustation on battery plates. Replace batteries if there are any signs of encrustation.
_____	_____	_____
M		(5) Reassemble lamp cord to battery cell units.
		4. Leakage test. **<u>CAUTION</u>**: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING WITH AIR.
		* a. Relief valve test.
M	I	(1) Using low pressure air, inflate the lower flotation tube slowly until the relief valve opens. Valve should open at no more than 2.8 psig. Allow pressure to bleed through relief valve until valve closes. Valve should be closed and leak tight at no less that 2.0 psig. Record readings. Open _____psig. Close _____psig.
_____	_____	_____
M	I	* (2) Repeat step 4a(1) on the relief valve on the upper tube. Inflate through upper tube manual inflation valve. Open _____psig. Close _____psig.
_____	_____	_____
		b. 24-hour leak test.
M		* (1) Using low pressure air, inflate both flotation tubes to 2.0 psig. Inflate the inflatable floor to 1.0 psig. Introduce air through manual inflation valves.
_____	_____	_____
M		* (2) After 1 hour, check pressure in tubes and floor. Adjust pressures per step 4b(1) if necessary. Record time, ambient temperature, and barometric pressure on chart below.
_____	_____	_____
M		* (3) Allow raft to remain undisturbed for 24 hours, including the 1 hour adjustment time.

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
M	I	* (4) After 24 hours, read and record raft pressure, ambient temperature, and barometric pressure on chart and enter correction as follows: For each 0.1 inch of mercury, increase add 0.049 psi. For each 0.1 inch of mercury, decrease sub 0.049 psi. For each 1.0 deg F of temperature, decrease add 0.031 psi. For each 1.0 deg F of temperature, increase sub 0.031 psi.
		*TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE / TEMPERATURE / UPPER CELL / LOWER CELL / FLOOR START _____ _____ _____ _____ _____ END _____ _____ _____ _____ _____ DIFF _____ (inc/dec) _____ (inc/dec) CORRECTION _____ (add/sub) _____ (add/sub) _____ _____ _____ ADJUST END PSI FOR ABOVE CORRECTION _____ _____ _____ NOTE: The life raft is considered satisfactory if the corrected flotation tube is not less than 1.5 psig. Inflatable floor pressure should be no less than 0.5 psig.
M		5. Inflation system inspection. **WARNING**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. NOTE: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date. a. Cylinder inspection. (1) Inspect cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement.

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
M		(2) Inspect cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders.
_____	_____	_____
M	I	(3) Weigh inflation assemblies. If weight is not the same as gross weight marked on cylinder, replace.
_____	_____	_____
M	I	(4) Record cylinder serial numbers and hydro test date. CYL #1 S/N _____ HYDRO TEST DATE _____ CYL #2 S/N _____ HYDRO TEST DATE _____
_____	_____	_____
		b. Valve assembly inspection.
M		(1) Check external surface of valve for evidence of corrosion, wear, loose screws, and dents.
_____	_____	_____
M		(2) Check that green dot is visible thru window in cover.
		6. Assembling the life raft.
M		a. Ensure emergency equipment and accessories are at hand and have been inspected.
_____	_____	_____
M		b. Attach accessories to raft loops from which removed.
_____	_____	_____
M		c. Obtain properly charged inflation assemblies. Secure cylinders in cylinder covers.
_____	_____	_____
M		d. Lace cylinders into raft cylinder holders. Attach cylinders to raft inlet valves. <u>NOTE</u>: Make sure that deflector is removed from the valve prior to installation.
_____	_____	_____
M		e. Record inspection date on life raft.
_____	_____	_____
M		* f. Using a vacuum source, completely deflate both flotation tubes and center float.

MECH	INSP	SWITLIK 6-MAN P/N RA-6002/EX-6001 LIFE RAFT INSPECTION
M		g. Powder raft liberally with talc or powdered soapstone.
_____	_____	_____
M		h. Fold raft per manufacturer's folding diagram (reference TI 4158.1-25-31) and secure raft in container. **WARNING**: ENSURE INFLATION SYSTEM ACTUATING LANYARDS ARE PROPERLY ATTACHED. IF INFLATION SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT.
M		7. Record inspection date on serviceable part tag and insert tag in plastic card holder on raft container.
	I	8. Inspect work order for completeness.
	I	9. Life raft inspection complete.

RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
						03206
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 7

MECH	INSP	EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION
*		NOTE: Items marked with an * are only required on the functional check.
*		Check type of inspection — General Inspection ☐ Functional Check ☐
		Reference TI 4158.1-25-29
		1. General raft inspection.
		CAUTION: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING RAFT WITH AIR.
		* Using a source of low pressure, clean, dry air, inflate both flotation chambers to approximately 1.0 psig. Introduce air through the manual inflation valves.
		Visually inspect raft for the following:
M		a. Raft fabric for tears, cuts, punctures, deterioration, and abrasions.
M		b. Seam tapes for proper adhesion.
M		c. Raft floor for wear, tears, punctures, deterioration, and abrasions.
M		d. All patches for proper adhesion.
M		e. Sea anchor for wear, tears, and general condition. Sea anchor mooring line for condition.
M		f. All lines for condition and security of attachment.
M		g. Manual inflation valves and pressure relief valves for deterioration or other damage.
M		h. All hardware for corrosion, damage, security of attachment, and, if applicable, ease of operation.

MECH	INSP	EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION
M		i. Markings for legibility. Remark as required.
		2. Carrying case and equipment container inspection.
M		a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. Ensure all markings are legible.
_____	_____	_____
M		b. Check handles, loops, and straps for general condition and security of attachment.
_____	_____	_____
M		c. Check all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
		3. Emergency equipment and accessories inspection. Make a physical inventory of accessories and emergency equipment. Ensure all required items are accounted for and are in serviceable condition.
		a. Perform operational check on rescue locator beacon. Perform check in accordance with decal attached to the transmitter.
M		(1) Check battery expiration date. The battery will be replaced every 2 years.
_____	_____	_____
M		(2) Record battery expiration date: _____.
_____	_____	_____
M		(3) Record transmitter S/N: _____.
_____	_____	_____
		b. Hand pump and adapter.
M		(1) Operate pump and ensure it delivers air.
_____	_____	_____
M		(2) Close pump outlet and check piston seal.
_____	_____	_____
M		(3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.

MECH	INSP	EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION
M		c. Check raft repair kit for completeness. Replace missing items.
_____	_____	_____
M		d. Check canopy and canopy poles for condition.
_____	_____	_____
M		e. Inspect Survivor 06 Watermaker Kit for damage and condition. Clean as required per attached instructions or TI 4158.1-25-39.
_____	_____	_____
M	I	f. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition.
_____	_____	_____
M		g. Repack accessory items and secure accessory container to life raft.
_____	_____	_____
		h. Check ARCL8-1 locator light and battery as follows:
M		(1) Check battery cell unit for swelling. Cell case thickness shall not exceed 7/16 inch.
_____	_____	_____
M		(2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights.
_____	_____	_____
M		(3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____
_____	_____	_____
M		(4) Look into water access holes and check for encrustation. Replace batteries which show signs of encrustation.
_____	_____	_____
M		(5) Reassemble lamp electrical cord to battery cell unit.
		4. Leakage test. **<u>CAUTION</u>**: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING WITH AIR.
M	I	* a. Relief valve test. (Perform on rafts having relief valves.)

MECH	INSP	EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION
M		(1) Using low pressure air, inflate the upper flotation chamber slowly until the relief valve opens. Valve should open at no more than 3.0 psig. Allow pressure to bleed through relief valve until valve closes. Valve should be closed and leak tight at no less that 2.0 psig. Apply soap and water solution to relief valve to ascertain valve is leak tight. Record readings. Open _____psig. Close _____psig.
_____	_____	_____
M		* (2) Repeat inspection on lower flotation chamber. Open _____psig. Close _____psig. NOTE: Replace relief valves that do not pass this test.
_____	_____	_____
		b. 24-hour leak test.
M		* (1) Using low pressure, oil-free air, inflate lower flotation chamber to 2.0 psig. Introduce air through manual inflation valve.
_____	_____	_____
M		* (2) Inflate upper flotation chamber in the same manner to 2.0 psig.
_____	_____	_____
M		* (3) Inflate the deck float to 1.0 psig. Record time _____
_____	_____	_____
M		* (4) After 1 hour, check pressure in both tubes and deck float. Adjust to original pressure, if necessary. Record time, date, ambient temperature, and barometric pressure on chart below.
_____	_____	_____
M		* (5) Allow raft to remain undisturbed for 24 hours, including the 1 hour adjustment time.
_____	_____	_____
M		(6) After 24 hours, read and record raft pressure, ambient temperature, and barometric pressure on chart and enter correction as follows: For each 0.1 inch of mercury, increase add 0.05 psi. For each 0.1 inch of mercury, decrease sub 0.05 psi. For each 1.0 deg F of temperature, decrease add 0.03 psi. For each 1.0 deg F of temperature, increase sub 0.03 psi.

MECH	INSP	**EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION**
		* TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE TEMPERATURE UPPER CELL LOWER CELL FLOOR START _____ _____ _____ _____ _____ END _____ _____ _____ _____ _____ DIFF _____ _____ (inc/dec) (inc/dec) CORRECTION _____ _____ _____ _____ _____ (add/sub) (add/sub) ADJUST END PSI FOR ABOVE CORRECTION _____ _____ _____ NOTE: The life raft is considered satisfactory if the corrected pressure in each tube is not less than 1.5 psig and 0.5 psig in the deck float. If the raft does not pass, locate leak(s) and repair. Retest raft after repairs are performed.
		5. Inflation system inspection. **WARNING**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. NOTE: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date. a. Cylinder inspection.
M		(1) Check cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement.
_____ M	_____	_____ (2) Check cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders
_____ M	_____ I	_____ (3) Weigh inflation assembly. If weight is not the same as gross weight marked on cylinder, replace.

MECH	INSP	EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION
M	I	(4) Record cylinder serial numbers and hydro static test date. CYL #1 S/N _____ HYDRO TEST DATE _____ CYL #2 S/N _____ HYDRO TEST DATE _____
_____	_____	_____ b. Valve assembly inspection.
M		(1) Inspect external surface of valve for evidence of corrosion, wear, loose screws, and dents.
_____	_____	_____
M		(2) Check that green dot is visible thru window in cover (A128 valve only).
		6. Assembling the life raft.
M		a. Ensure emergency equipment and accessories are at hand and have been inspected.
_____	_____	_____
M		b. Attach accessories to raft loops from which removed.
_____	_____	_____
M		c. Obtain properly charged inflation assemblies. Secure cylinders in cylinder covers.
_____	_____	_____
M		d. Lace cylinders into raft cylinder holders. Attach cylinders to raft inlet valves. NOTE: Make sure that deflector is removed from the valve prior to installation.
_____	_____	_____
M		e. Record inspection date on life raft.
_____	_____	_____
M		* f. Using a vacuum source, completely deflate both flotation chambers.
_____	_____	_____
M		g. Powder raft liberally with talc or powdered soapstone.

MECH	INSP	EASTERN AERO MARINE MODEL NO. T6A LIFE RAFT INSPECTION
M		h. Fold raft per manufacturer's folding diagram (reference TI 4158.1-25-29) and secure raft in container. **WARNING**: ENSURE FLOTATION SYSTEM ACTUATING LANYARDS ARE PROPERLY ATTACHED. IF INFLATION SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT.
M		7. Record inspection date on serviceable part tag and insert tag in plastic card holder on raft container.
	I	8. Inspect work order for completeness.
	I	9. Life raft inspection complete.

RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
		DATE	P/N	S/N	WORK ORDER NO.	03208 PAGE 1 OF 7

MECH	INSP	AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION
*		NOTE: Items marked with an * are only required on the functional check.
*		Check type of inspection — General Inspection ☐ Functional Check ☐
		Reference TI 4158.1-25-33
		1. General raft inspection.
		CAUTION: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING RAFT WITH AIR.
		* Using a source of low pressure, clean, dry air, inflate both flotation chambers to approximately 1.0 psig. Introduce air through the manual inflation valves.
		Visually inspect raft for the following:
M		a. Raft fabric for tears, cuts, punctures, deterioration, and abrasions.
M		b. Seam tapes for proper adhesion. NOTE: ASID Model C-30A series rafts manufactured after May 17, 1976, are constructed without outside seam tapes.
M		c. Raft floor for wear, tears, punctures, deterioration, and abrasions.
M		d. All patches for proper adhesion.
M		e. Pockets for tears, abrasions, and security of attachment.
M		f. Sea anchor for wear, tears, and general condition. Sea anchor mooring line for condition.
M		g. Boarding aids for deterioration and security of attachment.

MECH	INSP	AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION
M		h. All lines for condition and security of attachment.
_____	_____	_____
M		i. Manual inflation valves for deterioration or other damage. Ensure plugs fit valves and are securely attached to valves.
_____	_____	_____
M		j. All hardware for corrosion, damage, security of attachment, and, if applicable, ease of operation.
_____	_____	_____
M		k. Markings for legibility. Remark as required.
_____	_____	_____
M		l. Turn raft over and repeat steps 1a thru 1k.
		2. Carrying case and equipment container inspection.
M		a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. Ensure all markings are legible.
_____	_____	_____
M		b. Inspect handles, loops, and straps for general condition and security of attachment.
_____	_____	_____
M		c. Inspect all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
		3. Emergency equipment and accessories inspection. Make a physical inventory of accessories and emergency equipment. Ensure all required items are accounted for and are in serviceable condition. a. Perform operational check on rescue locator beacon. Perform check in accordance with decal attached to the transmitter.
M		(1) Check battery expiration date. The battery will be replaced every 2 years.
_____	_____	_____
M		(2) Record battery expiration date: _____.
_____	_____	_____
M		(3) Record transmitter S/N: _____.

MECH	INSP	AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION
		b. Hand pump and adapter.
M		(1) Operate pump and ensure it delivers air.
_____	_____	_____
M		(2) Close pump outlet and check piston seal.
_____	_____	_____
M		(3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.
_____	_____	_____
M		c. Check raft repair kit for completeness. Replace missing items.
_____	_____	_____
M		d. Inspect Survivor 06 Watermaker Kit for damage and condition. Clean as required per attached instructions or TI 4158.1-25-39.
_____	_____	_____
M		e. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition.
_____	_____	_____
M		f. Repack accessory items and secure accessory container to life raft.
_____	_____	_____
		g. Check ARCL8-1 locator light and battery (2 each) as follows:
M		(1) Check battery cell unit for swelling. Cell case thickness shall not exceed 7/16 inch.
_____	_____	_____
M		(2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights.
_____	_____	_____
M		(3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____
_____	_____	_____
M		(4) Look into water access holes and check for encrustation on battery plates. Replace batteries if there are any signs of encrustation.
_____	_____	_____
M		(5) Reassemble lamp cord to battery cell units.

MECH	INSP	AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION
M		(6) Repeat steps 3g(1) thru 3g(5) for second locator light assembly. Accept: _____ Reject: _____
		4. 24-hour leak test. **<u>CAUTION</u>**: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING WITH AIR. CAP ASPIRATORS AND HOSE END FITTINGS TO PREVENT LOSS OF AIR.
M		* a. Using low pressure, oil-free air, inflate lower flotation tube to 2.0 psig. Introduce air through manual inflation valve.
_____	_____	_____
M		* b. Inflate top flotation tube in the same manner to 2.0 psig through manual inflation valve.
_____	_____	_____
M		* c. Inflate center float to 1.0 psig.
_____	_____	_____
M		* d. It is advisable at this time to check unused manual inflation valves for leakage using soap and water solution. Any leakage must be corrected before proceeding.
_____	_____	_____
M		* e. Allow assembly to stand for 1 hour. Record time:_____
_____	_____	_____
M	I	* f. After 1 hour, check pressure in both tubes and center float. If necessary, adjust pressures to 2.0 psig in tubes and 1.0 psig in center float. Record time, date, ambient temperature, and barometric pressure on chart below.
_____	_____	_____
M		* g. Allow raft to remain undisturbed for 24 hours, including the 1 hour adjustment time.
_____	_____	_____
M	I	* h. After 24 hours, read and record raft pressure, ambient temperature, and barometric pressure on chart and enter correction as follows: For each 0.1 inch of mercury, increase add 0.05 psi. For each 0.1 inch of mercury, decrease sub 0.05 psi. For each 1.0 deg F of temperature, decrease add 0.03 psi. For each 1.0 deg F of temperature, increase sub 0.03 psi.

MECH	INSP	**AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION**
		*TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE / TEMPERATURE / LEFT CELL / RIGHT CELL / FLOOR START _____ _____ _____ _____ _____ END _____ _____ _____ _____ _____ DIFF _____ (inc/dec) _____ (inc/dec) CORRECTION _____ (add/sub) _____ (add/sub) _____ _____ _____ ADJUST END PSI FOR ABOVE CORRECTION _____ _____ _____ NOTE: The life raft is considered satisfactory if the corrected pressure in each tube is not less than 1.5 psig and center float is not less than 0.5 psig. If the raft does not pass, locate leak(s) and repair. Retest raft after repairs are performed.
		5. Inflation system inspection. **WARNING**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. NOTE: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date. a. Cylinder inspection. M (1) Inspect cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement. _____ _____ _____ M (2) Inspect cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders _____ _____ _____ M I (3) Weigh inflation assemblies. If weight is not the same as gross weight marked on cylinder, replace.

MECH	INSP	AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION
M	I	(4) Record cylinder serial numbers and hydro test date. CYL #1 S/N _____ HYDRO TEST DATE _____ CYL #2 S/N _____ HYDRO TEST DATE _____
_____	_____	_____
		b. Valve assembly inspection.
M		(1) Inspect external surface of valve for evidence of corrosion, wear, loose screws, and dents.
_____	_____	_____
M		(2) Check that green dot is visible thru window in cover.
		6. Assembling the life raft.
M		a. Ensure emergency equipment and accessories are at hand and have been inspected.
_____	_____	_____
M		b. Attach accessories to raft loops from which removed.
_____	_____	_____
M		c. Obtain properly charged inflation assemblies. Secure cylinders in cylinder covers.
_____	_____	_____
M		d. Lace cylinders into raft cylinder holders. Attach cylinders to raft inlet valves. NOTE: Make sure that deflector is removed from the valve prior to installation.
_____	_____	_____
M		e. Record inspection date on life raft.
_____	_____	_____
M		* f. Using a vacuum source, completely deflate both flotation tubes and center float. Ensure unused manual inflation valves are closed.
_____	_____	_____
M		g. Dust raft liberally with talc or powdered soapstone.

MECH	INSP	AMERICAN SAFETY (SWITLIK) MODEL NO. C-30A LIFE RAFT INSPECTION
M		h. Fold raft per manufacturer's folding diagram (reference TI 4158.1-25-33) and secure raft in container. **WARNING**: ENSURE INFLATION SYSTEM GAS RELEASE CABLES ARE PROPERLY ATTACHED TO LANYARD/MOORING LINE. IF SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT.
M		7. Record inspection date on serviceable part tag and insert tag in plastic card holder on raft container.
	I	8. Inspect work order for completeness.
	I	9. Life raft inspection complete.

RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
						03210
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 7

TECH	INSP	RFD LIMITED MODEL 4U MK.1 LIFE RAFT INSPECTION
		NOTE: Items marked with an * are only required on the functional check.
		Check type of inspection — General Inspection ☐ — Functional Check ☐
T		Reference TI 4158.1-25-25 1. General raft inspection. **CAUTION**: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING RAFT WITH AIR. * Using a source of low pressure, clean, dry air, inflate flotation chamber to approximately 1.0 psig. Introduce air through the manual inflation valves. Visually inspect raft for the following: a. Raft fabric for tears, cuts, punctures, deterioration, and abrasions. b. Seam tapes for proper adhesion. c. Raft floor for wear, tears, punctures, deterioration, and abrasions. d. All patches for proper adhesion. e. Sea anchor for wear, tears, and general condition. Sea anchor mooring line for condition. f. Webbing, ropes, lines, cordage, and Velcro strips for condition and security of attachment. g. Manual inflation valves and pressure relief valves for deterioration or other damage. h. All hardware for corrosion, damage, security of attachment, cleanliness, condition and, if applicable, ease of operation. i. Legibility of all instructions and labels.

TECH	INSP	RFD LIMITED MODEL 4U MK.1 LIFE RAFT INSPECTION
T		2. Carrying case and equipment container inspection. a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. Ensure all markings are legible. b. Check handles, loops, and straps for general condition and security of attachment. c. Check all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
T		3. Emergency equipment and accessories inspection. a. Perform operational check on rescue locator beacon. Perform check in accordance with decal attached to the transmitter. (1) Check battery expiration date. The battery will be replaced every 2 years. (2) Record battery expiration date: _____. (3) Record transmitter S/N: _____. (4) The shelf life of the ACR/L8 battery is 6 years. Discard if the battery will expire before the next inspection cycle. Date of manufacture _____.
_____ T	_____	_____ b. Hand pump and adapter. (1) Operate pump and ensure it delivers air. (2) Close pump outlet and check piston seal. (3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.
_____ T	_____	_____ c. Check canopy for condition.

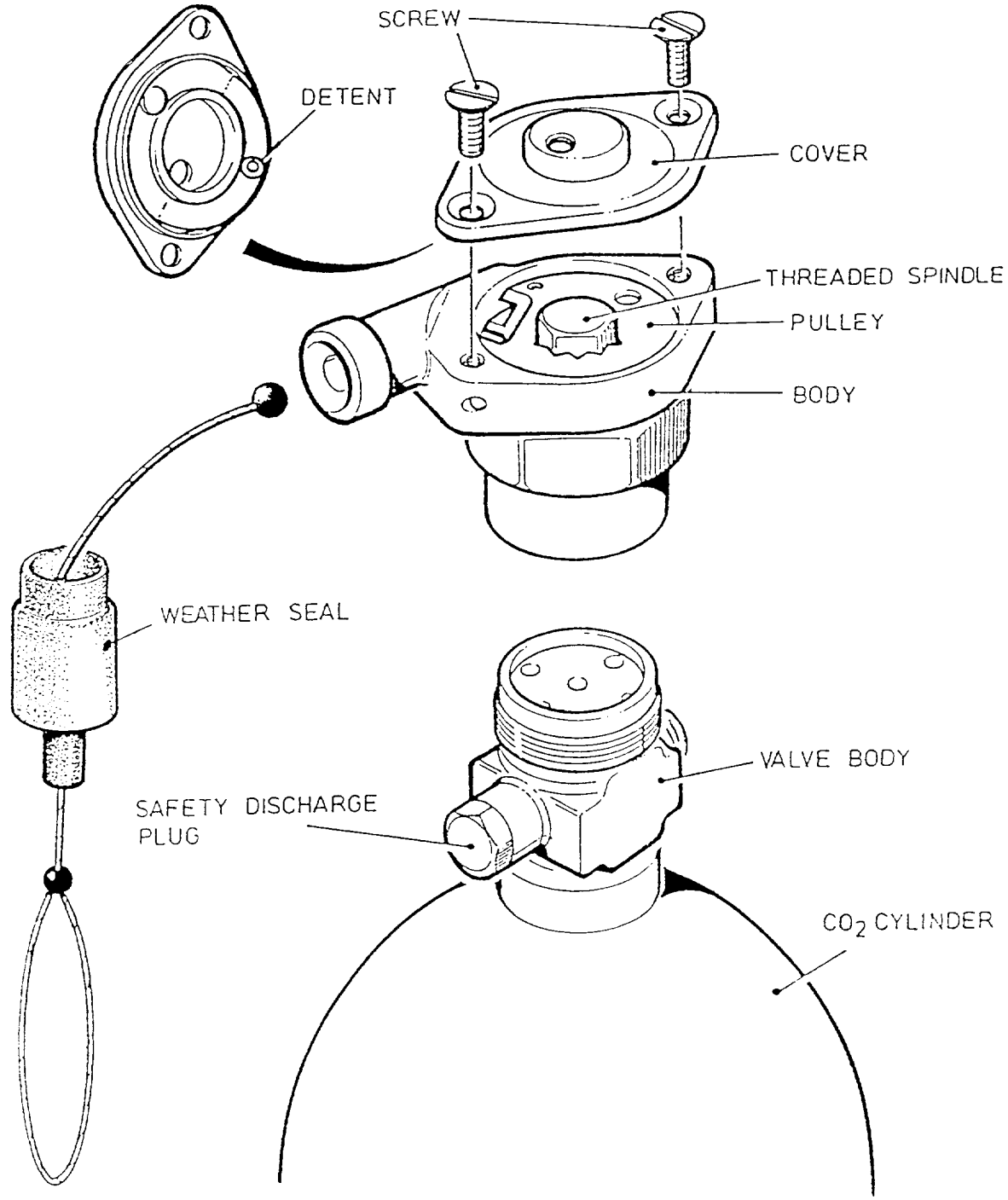
TECH	INSP	RFD LIMITED MODEL 4U MK.1 LIFE RAFT INSPECTION
T _____	_____	d. Inspect Survivor 06 Watermaker Kit for damage and condition. Clean as required per attached instructions or TI 4158.1-25-39. _____
T _____	_____	e. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition. _____
T _____	_____	f. Repack accessory items and secure accessory container to life raft. _____
T		g. Check locator light and battery as follows: (1) Check battery cell unit for swelling. Cell case thickness shall not exceed 7/16 inch. (2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights. (3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____ (4) Look into water access holes and check for encrustation. Replace batteries which show signs of encrustation. (5) Reassemble lamp electrical cord to battery cell unit.
		4. Leakage test. **<u>CAUTION</u>**: ENSURE INFLATION ASSEMBLIES ARE REMOVED BEFORE INFLATING WITH AIR.
T		* a. Relief valve test. Using low pressure air, inflate the left-hand flotation chamber slowly until the relief valve opens. Valve should open at no more than 3.0 psig. Allow pressure to bleed through relief valve until valve closes. Valve should be closed and leak tight at no less that 2.0 psig. Apply soap and water solution to relief valve to ascertain valve is leak tight. Open _____psig. Close _____psig.

TECH	INSP	RFD LIMITED MODEL 4U MK.1 LIFE RAFT INSPECTION
T		* b. 24-hour leak test. * (1) Using low pressure, oil-free air, inflate left flotation chamber to 2.0 psig. Introduce air through manual inflation valves. Record Time _____ * (2) After 1 hour, check pressure in chamber. Adjust pressures to 2.0 psig if necessary. Record time, date, ambient temperature, and barometric pressure on chart below. * (3) Allow raft to remain undisturbed for 24 hours, excluding the 1 hour adjustment time. (4) After 24 hours, read and record raft pressure, ambient temperature, and barometric pressure on chart and enter correction as follows: For each 0.1 inch of mercury, increase add 0.05 psi. For each 0.1 inch of mercury, decrease sub 0.05 psi. For each 1.0 deg F of temperature, decrease add 0.03 psi. For each 1.0 deg F of temperature, increase sub 0.03 psi.
		TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE TEMPERATURE CELL START _____ _____ _____ END _____ _____ _____ DIFF _____ _____ (inc/dec) (inc/dec) CORRECTION _____ _____ _____ (add/sub) (add/sub) ADJUST END PSI FOR ABOVE CORRECTION _____ NOTE: The life raft is considered satisfactory if the corrected pressure in each chamber is not less than 1.5 psig. If the raft does not pass, locate leak(s) and repair. Retest raft after repairs are performed.

TECH	INSP	RFD LIMITED MODEL 4U MK.1 LIFE RAFT INSPECTION
		5. Inflation system inspection. **<u>WARNING</u>**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. <u>NOTE</u>: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date.
T		a. Cylinder inspection. (1) Check cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement. (2) Check cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders (3) Weigh inflation assembly. If weight is not the same as gross weight marked on cylinder, replace. (4) Check that the siphon tube inside the cylinder is serviceable; shake the cylinder. If the tube is still flexible, it will strike the wall of the cylinder with a ringing sound. If there is a noticeable delay before the sound is heard, the tube has stiffened and is no longer serviceable, and the cylinder must be rejected. (5) Record cylinder serial numbers and hydrostatic test date. S/N _____ HYDRO TEST DATE _____
_____ T	_____	_____ b. Valve assembly inspection. (1) Inspect external surface of valve for evidence of corrosion, wear, loose screws, and dents. (2) To check operating head for function, remove the cover plate (see figure 505) and pull the cable out of the operating head. Check that the pulley moves freely by rotating it with a finger and that the threaded spindle moves up and down correspondingly. (3) Check operating cable for corrosion and fraying.

TECH	INSP	RFD LIMITED MODEL 4U MK.1 LIFE RAFT INSPECTION
		(4) Install operating cable and cover plate.
T		6. Assembling the life raft. a. Ensure emergency equipment and accessories are at hand and have been inspected. b. Attach accessories to raft loops from which removed. c. Obtain properly charged inflation assembly. Secure cylinder in cylinder cover. d. Lace cylinder into raft cylinder holders. Attach cylinder to raft inlet valves. e. Record inspection date on life raft. * f. Using a vacuum source, completely deflate flotation chamber. g. Powder raft liberally with talc or powdered soapstone. h. Fold raft per manufacturer's folding diagram and secure raft in container. **WARNING**: ENSURE FLOTATION SYSTEM ACTUATING LANYARDS ARE PROPERLY ATTACHED. IF INFLATION SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT.
T		7. Record inspection date on AC Form 196-1 and insert tag in plastic card holder on raft container.
	I	8. Inspect work order for completeness.
	I	9. Life raft inspection complete.

RFD LIMITED MODEL 4U MK.1
LIFE RAFT INSPECTION



ASSEMBLY OF OPERATING HEAD
FIGURE 505

* RELATED CARDS		LIFE RAFT INSPECTION				CARD NUMBER
						03212
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 6

TECH	INSP	SWITLIK 4-MAN & 6-MAN MODEL CLR-4001 AND CLR-6001 LIFE RAFT INSPECTION
		NOTE: Items marked with an * are only required on the functional check.
		Check type of inspection — General Inspection ☐ — Functional Check ☐
T		Reference TI 4158.1-25-12

1. General raft inspection.

CAUTION: REMOVE INFLATION ASSEMBLY PER MAINTENANCE MANUAL INSTRUCTION BEFORE INFLATING RAFT WITH AIR.

* a. Using low pressure, oil-free air, or the reverse flow of a vacuum cleaner, inflate the raft to approximately 1.0 psig. Introduce air through the manual inflation valves.

b. Visually inspect the raft fabric for tears, punctures, cuts, abrasions, and deterioration.

c. Inspect seam tapes for proper adhesion.

d. Inspect raft deck and attaching tapes joining tapes to flotation tubes for wear, tears, cuts, and deterioration.

e. Inspect all patches for proper adhesion.

f. Inspect pockets for tears, abrasions, and security of attachment.

g. Inspect handles for wear, deterioration, and security of attachment.

h. Inspect sea anchor for wear, tears, and security of attachment.

i. Inspect heaving line for condition and security of attachment and, if applicable, ease of operation.

j. Inspect manual inflation valves for deterioration or other damage.

k. Inspect all hardware for corrosion, damage, security of attachment, and, if applicable, ease of operation.

TECH	INSP	SWITLIK 4-MAN & 6-MAN MODEL CLR-4001 AND CLR-6001 LIFE RAFT INSPECTION
		l. Inspect raft fabric for stains, dirt, and general cleanliness. m. Inspect stencil marking for legibility. Remark as required. n. Inflate optional floor if provided and visually inspect for condition.
T		2. Carrying case and equipment container inspection. a. Visually inspect the carrying case and equipment container fabric for cuts, tears, abrasions, cleanliness, and general condition. Turn inside out and repeat inspection. b. Inspect markings for completeness and legibility. Remark as required. c. Inspect handles and straps for general condition and security of attachment. d. Inspect all hardware for damage, corrosion, security of attachment, and, if applicable, ease of operation.
T		3. Emergency equipment and accessories inspection. Make a physical inventory of accessories and emergency equipment. Ensure all required items are accounted for and are in serviceable condition. a. Check portable rescue beacon (EBC-102) for the following. (1) Condition of floatation collar. (2) Record battery expiration date: _____. (Replace every 2 years.) (3) Test beacon per instruction on transmitter. (4) The shelf life of the ACR/L8 battery is 6 years. Discard if the battery will expire before the next inspection cycle. Date of manufacture _____.

TECH	INSP	SWITLIK 4-MAN & 6-MAN MODEL CLR-4001 AND CLR-6001 LIFE RAFT INSPECTION
T		b. Hand pump and adapter. (1) Operate pump and ensure it delivers air. (2) Close pump outlet and check piston seal. (3) Ensure pump adapter fits pump and manual inflation valves. Check threads for condition.
_____ T	_____	_____ c. Check raft repair kit for completeness.
_____ T	_____	_____ d. Refer to TI 4158.1-25-1 for additional required equipment and inspect for condition.
_____ T	_____	_____ e. Repack accessory items and secure accessory container to life raft.
_____ T	_____	_____ f. Check locator light and battery as follows: (1) Check battery cell unit for swelling. Cell case thickness shall not exceed 0.475 inch. (2) Disconnect lamp unit from cell unit; connect a 1 1/2 volt power supply to connector and check that lamp lights. (3) Using a standard megohmmeter, test battery by connecting across the pins of the battery. Replace battery if resistance is less than 50 megohms. Accept: _____ Reject: _____ (4) Look into water access holes and check for encrustation. Replace batteries which show signs of encrustation. (5) Reassemble lamp electrical cord to battery cell unit.
		4. Testing. <u>NOTE</u>: All rafts manufactured by Switlik Parachute company, Inc., over 5 years old shall be proof-tested.

TECH	INSP	SWITLIK 4-MAN & 6-MAN MODEL CLR-4001 AND CLR-6001 LIFE RAFT INSPECTION
T		a. Proof test (performed at 5-year intervals). **<u>WARNING</u>**: ALL PERSONNEL MUST BE AT LEAST 20 FEET AWAY FROM RAFT DURING THIS TEST. DO NOT LEAK-CHECK DURING THIS TEST. (1) Inflate the buoyancy tubes to 5.0 psi for 5 minutes. No seam separation or bursting of fabric is allowed.
_____	_____	_____
T		* b. Leakage test. (1) Inflate one side of the raft thru the topping-off valve until the pressure relief valve opens. The pressure relief valve should open at pressure not exceeding 2.8 psi. Allow the valves to reseat; reseat pressure should be not less than 2 psi. While the raft is inflated, check all valves, test adapter, and plugs to ensure there are no leaks. Record pressures: OPEN _____psi. CLOSE _____psi. * (2) Reduce pressure to 2 psi and allow to stand for 1 hour so that the air in the chamber comes to room temperature. At the end of the 1-hour period, check the pressure and readjust to 2 psi if necessary and record the barometric pressure and room temperature. * (3) At the end of 6 hours, take a reading of the pressure in the chamber and record the barometric pressure and room temperature. Correct for barometric and temperature changes in accordance with the following steps (a) and (b). The final pressure after correction should not be less that 1.8 psi. (a) For each 0.1 inch of mercury, increase add 0.05 psi. For each 0.1 inch of mercury, decrease sub 0.05 psi. _____ (b) For each 1.0 deg F of temperature, decrease add 0.03 psi. For each 1.0 deg F of temperature, increase sub 0.03 psi.

TECH	INSP	**SWITLIK 4-MAN & 6-MAN MODEL CLR-4001 AND CLR-6001 LIFE RAFT INSPECTION**
		TIME/DATE STARTED _____ TIME/DATE ENDED_____ BAROMETRIC PRESSURE / TEMPERATURE / CHAMBER (1) / CHAMBER (2) / ARCH (1) / ARCH (2) START _____ _____ _____ _____ _____ _____ END _____ _____ _____ _____ _____ _____ DIFF _____ (inc/dec) _____ (inc/dec) _____ _____ _____ _____ CORRECTION _____ (add/sub) _____ (add/sub) _____ _____ _____ _____ ADJUST END PSI FOR ABOVE CORRECTION _____ _____ _____ _____
		* (4) Completely deflate the chamber just tested and repeat steps (1) thru (3) for the other side of the raft. * (5) Test the arches in the same manner except that the final pressure after correction in the arches should not be less that 1.5 psi. Both arches may be tested at the same time.
T		5. Inflation system inspection. **WARNING**: GAS UNDER PRESSURE. DO NOT ATTEMPT TO REMOVE REGULATOR FROM CHARGED CYLINDER. NOTE: Every 5 years, cylinders used for inflating multiplace life rafts shall be subjected to a hydrostatic test. Date of last hydrostatic test is stamped on cylinder shoulder. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date. a. Cylinder inspection. (1) Inspect cylinder for presence and legibility of the following markings: tare weight, weight of CO_2 charge, weight of nitrogen charge, and gross weight. If markings are illegible, discharge cylinder and obtain replacement. (2) Inspect cylinders for evidence of wear, corrosion, dents, or other obvious defects. Replace defective cylinders (3) Weigh inflation assemblies. If weight is not the same as gross weight marked on cylinder, replace.

TECH	INSP	SWITLIK 4-MAN & 6-MAN MODEL CLR-4001 AND CLR-6001 LIFE RAFT INSPECTION
T		(4) Record cylinder serial number and hydro test date. CYL S/N _____ HYDRO TEST DATE _____
T		6. Assembling the life raft. a. Ensure emergency equipment and accessories are at hand and have been inspected. b. Attach accessories to raft loops from which removed. c. Obtain properly charged inflation assemblies. Secure cylinders in cylinder covers. d. Lace cylinders into raft cylinder holders. Attach cylinders to raft inlet valves. NOTE: Make sure that deflector is removed from the valve prior to installation. e. Record inspection date on life raft. * f. Using a vacuum source, completely deflate both flotation tubes and center float. g. Powder raft liberally with talc or powdered soapstone. h. Fold raft per manufacturer's folding diagram (reference TI 4158.1-25.12) and secure raft in container. **WARNING**: ENSURE INFLATION SYSTEM GAS RELEASE CABLES ARE PROPERLY ATTACHED TO LANYARD/MOORING LINE. IF SYSTEM IS IMPROPERLY RIGGED, LOSS OF LIFE COULD RESULT. i. Record inspection date on AC Form 196-1 and insert in plastic card holder on raft container.
	I	7. Inspect work order for completeness.
	I	8. Life raft inspection complete.

RELATED CARDS		LIFE VEST INSPECTION				CARD NUMBER
		DATE	P/N	S/N	WORK ORDER NO.	03214 PAGE 1 OF 4
TECH	**INSP**	**EASTERN AERO MARINE MODEL NOS. KS-9, KS-12, KS-35, KSD-35, KSE-35 LIFE VEST INSPECTION**				
		NOTE: Items marked with an * are only required on the functional check.				
		Check type of inspection	General Inspection ☐	Functional Check ☐		
T		Reference TI 4158.1-25-17 1. Inspect all fabric for abrasion, chafing, and soiling.				
T		2. Inspect back panel for readability of instructions.				
T		3. Carefully examine all stitching.				
T		4. Inspect webbing and determine that it is not damaged.				
T		5. Inspect snaps, buckle, D-ring, and inflaters for corrosion and damage.				
T		6. Inspect and determine that the snaps and buckles operate properly.				
T		7. Inspect oral tube for splitting or other damage.				
T		8. Inspect water-activated battery and powered light as follows: a. Inspect for proper installation, attachment, and physical condition of the lamp, wire, and battery. b. Check battery for swelling. A swollen battery case indicates that it has been seriously affected by moisture and has been rendered useless. Replace battery if thickness exceeds .475". c. Remove plugs that close water access hole in the battery and inspect plates for encrustation. Replace batteries which show encrustation. d The shelf life of the ACR/L8 battery is 6 years. Discard if the battery will expire before the next inspection cycle. Date of manufacture _____.				

TECH	INSP	EASTERN AERO MARINE MODEL NOS. KS-9, KS-12, KS-35, KSD-35, KSE-35 LIFE VEST INSPECTION
		CAUTION: KSE-TYPE LIFE PRESERVERS ONLY. ABSENCE OF A BATTERY PULL RING WITH ASSOCIATED PLUGS IN THE KSE-TYPE LIFE PRESERVERS IS A FEATURE WHICH PROVIDES REQUIRED AUTOMATIC ILLUMINATION OF THE EMERGENCY LIGHTING SYSTEM WHEN THE BATTERY COMES IN CONTACT WITH WATER. WHEN SERVICING, REPAIRING, OR OVERHAULING KSE-TYPE PRESERVERS, DO NOT USE PULL RING WITH BATTERY PLUGS. USE REPLACEMENT BATTERY ASSEMBLY P/N 511-10, BUT REMOVE PULL RING WITH PLUGS AT THAT TIME.
T		9. Battery electrical test. a. Use a regular megger (volt-ohmmeter). Test by connecting the megger across the pins of the battery. RECORD READING _____ b. Replace battery if resistance is less than 50 megohms.
T		10. Lamp electrical test. Connect a 1.5 volt DC supply to the receptacle attached to the lamp, which was unplugged from the battery. If lamp fails to light, replace.
T		11. After testing the lamp and battery, connect the battery or its replacement to the lamp by plugging the pin end into the receptacle. Retape and attach to the center strap.
T		12. CO_2 cylinder weight check. a. Remove CO_2 cylinders from inflaters. b. Determine that the correct cylinder is being used. _____ KS-9 series vests - 9 gram cylinder _____ KS-12 series vests - 12 gram cylinder _____ KS-35 series vests - 16 gram cylinder c. Record the gross weight stamped on the cylinder. Cylinder No. 1 _____ Cylinder No. 2 _____

TECH	INSP	EASTERN AERO MARINE MODEL NOS. KS-9, KS-12, KS-35, KSD-35, KSE-35 LIFE VEST INSPECTION
T		d. Weight-check the cylinders. The weight stamped on the cylinder is the minimum allowable weight. Record actual weight. Cylinder No. 1 _____ Cylinder No. 2 _____
T		13. Leakage test. During the leakage test, record barometric pressure and temperature twice; first when life preservers are inflated, and then at the end of the time interval used for checking pressure in the life preserver cells. Cell pressure should be corrected for barometric pressure and temperature change as follows: For each 0.1 inch of mercury increase, add 0.049 psi. For each 0.1 inch of mercury decrease, sub 0.049 psi. For each 1.0 deg F temperature increase, add 0.031 psi. For each 1.0 deg F temperature decrease, sub 0.031 psi. Perform leakage test as follows: * a. Inflate each cell of the life preserver through the oral tube to 2 psi from a regulated air supply not-to-exceed 10 psi. Allow 15 minutes for pressure to stabilize, and then readjust pressure to 2 psi. * b. The life preserver will pass if any one of the following time leak checks is met. (Check one.) TIME INTERVAL — PRESSURE (adjusted for barometric pressure and temperature change) _____ 4 hours — 1.8 psi _____ 8 hours — 1.7 psi _____ 12 hours — 1.5 psi _____ 18 hours — 1.4 psi _____ 24 hours — 1.3 psi * c. Record of leakage test. Time started: _____ Time ended: _____

TECH	INSP	EASTERN AERO MARINE MODEL NOS. KS-9, KS-12, KS-35, KSD-35, KSE-35 LIFE VEST INSPECTION
		PSI BAROMETRIC PRESSURE TEMPERATURE CELL #1 CELL #2 Start _____ _____ _____ _____ End _____ _____ _____ _____ Difference _____ _____ (inc/dec) (inc/dec) Correction _____ _____ (see chart) (add/sub) (add/sub) _____ _____ Adjust end psi for above correction: ADJUSTED PSI _____ _____ * d. A life preserver with any cell that fails the leak check will be rejected and set aside to determine the cause and required repair.
T		14. Life preservers that pass the leakage test should be deflated and the CO_2 cylinders reinstalled.
T		15. Record inspection date on vest.
	I	16. Life vest inspection complete.

RELATED CARDS		LIFE VEST INSPECTION				CARD NUMBER
						03215
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 4

TECH	INSP	HOOVER MODEL FV-35 AND FV-35E LIFE VEST INSPECTION
		NOTE: Items marked with an * are only required on the functional check.
		Check type of inspection — General Inspection ☐ — Functional Check ☐
T		Reference TI 4158.1-25-37 1. Inspect all fabric for abrasion, chafing, and soiling.
T		2. Inspect back panel for readability of instructions.
T		3. Carefully examine all stitching.
T		4. Inspect webbing and determine that it is not damaged.
T		5. Inspect snaps, buckle, D-ring, and inflaters for corrosion and damage.
T		6. Inspect and determine that the snaps and buckles operate properly.
T		7. Inspect oral tube for splitting or other damage.
T		8. Inspect water-activated battery and powered light as follows: a. Inspect for proper installation, attachment, and physical condition of the lamp, wire, and battery. b. Check battery for swelling. A swollen battery case indicates that it has been seriously affected by moisture and has been rendered useless. Replace battery if thickness exceeds .475". c. Remove plugs that close water access hole in the battery and inspect plates for encrustation. Replace batteries which show encrustation.

TECH	INSP	HOOVER MODEL FV-35 AND FV-35E LIFE VEST INSPECTION
		d The shelf life of the ACR/L8 battery is 6 years. Discard if the battery will expire before the next inspection cycle. Date of manufacture _____. **CAUTION**: FV-35E TYPE LIFE PRESERVERS ONLY. ABSENCE OF A BATTERY PULL RING WITH ASSOCIATED PLUGS IN THE FV-35E TYPE LIFE PRESERVERS IS A FEATURE WHICH PROVIDES REQUIRED AUTOMATIC ILLUMINATION OF THE EMERGENCY LIGHTING SYSTEM WHEN THE BATTERY COMES IN CONTACT WITH WATER. WHEN SERVICING, REPAIRING, OR OVERHAULING FV-35E TYPE PRESERVERS, DO NOT USE PULL RING WITH BATTERY PLUGS.
T		9. Battery electrical test. a. Use a regular megger (volt-ohmmeter). Test by connecting the megger across the pins of the battery. RECORD READING _____ b. Replace battery if resistance is less than 50 megohms.
T		10. Lamp electrical test. Connect a 1.5 volt DC supply to the receptacle attached to the lamp, which was unplugged from the battery. If lamp fails to light, replace.
T		11. After testing the lamp and battery, connect the battery or its replacement to the lamp by plugging the pin end into the receptacle. Retape and attach to the center strap.
T		12. CO_2 cylinder weight check. a. Remove CO_2 cylinders from inflaters. b. Determine that the correct cylinder is being used (16 GRAM CO_2 weight). c. Record the gross weight stamped on the cylinder. Cylinder No. 1 _____ Cylinder No. 2 _____ d. Weight-check the cylinders. The weight stamped on the cylinder is the minimum allowable weight. Record actual weight. Cylinder No. 1 _____ Cylinder No. 2 _____

TECH	INSP	HOOVER MODEL FV-35 AND FV-35E LIFE VEST INSPECTION
T		13. Leakage test. During the leakage test, record barometric pressure and temperature twice; first when life preservers are inflated, and then at the end of the time interval used for checking pressure in the life preserver cells. Cell pressure should be corrected for barometric pressure and temperature change as follows: For each 0.1 inch of mercury increase, add 0.049 psi. For each 0.1 inch of mercury decrease, sub 0.049 psi. For each 1.0 deg F temperature increase, add 0.031 psi. For each 1.0 deg F temperature decrease, sub 0.031 psi. Perform leakage test as follows: * a. Inflate each cell of the life preserver through the oral tube to 2 psi from a regulated air supply not-to-exceed 10 psi. Allow 15 minutes for pressure to stabilize, and then readjust pressure to 2 psi. * b. The life preserver will pass if any one of the following time leak checks is met. (Check one.) TIME INTERVAL — PRESSURE (adjusted for barometric pressure and temperature change) _____ 4 hours — 1.8 psi _____ 8 hours — 1.7 psi _____ 12 hours — 1.5 psi _____ 18 hours — 1.4 psi _____ 24 hours — 1.3 psi * c. Record of leakage test. Time started: _____ Time ended: _____ PSI BAROMETRIC PRESSURE — TEMPERATURE — CELL #1 — CELL #2 Start _____ _____ _____ _____ End _____ _____ _____ _____ Correction _____ _____ ADJUSTED PSI _____ _____

TECH	INSP	HOOVER MODEL FV-35 AND FV-35E LIFE VEST INSPECTION
T		* d. A life preserver with any cell that fails the leak check will be rejected and set aside to determine the cause and required repair.
T		14. Life preservers that pass the leakage test should be deflated and the CO_2 cylinders reinstalled.
T		15. Record inspection date on vest.
T		16. Record inspection date on AC Form 196-1 and attach to vest.
	I	17. Life vest inspection complete.

RELATED CARDS		LIFE PRESERVER INSPECTION				CARD NUMBER
						03216
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 6

TECH	INSP	AIR CRUISER MODEL A/C-2, A/C-3, A/C-4 AND AD-8 SERIES LIFE PRESERVER INSPECTION
		NOTE: Items marked with an * are only required on the functional check.
		Check type of inspection — General Inspection ☐ — Functional Check ☐
		Reference TI 4158.1-25-42.
T		1. Inspect Jacket Assembly Cells a. Inspect stitching for broken or loose threads. b. Inspect fabric for punctures, abrasion, and tears. c. Inspect heat sealed seams for openings and for signs of separation.
T		2. Inspect Webbing a. Inspect life jacket webbing for tears and fraying. b. Inspect for secure attachment of components.
T		3. Inspect Cell Assembly Integral Fittings a. Inspect check valve stem for wear, threads clogged with foreign matter, defective threads, and damage. b. Inspect valve core for damage. Check operation by depressing pin. c. Inspect oral tube for damage and fatigue cracks, particularly at base attachment patch. d. Inspect oral tube check valve for damage and proper functioning. e. Inspect snap assemblies for correct operation and security.

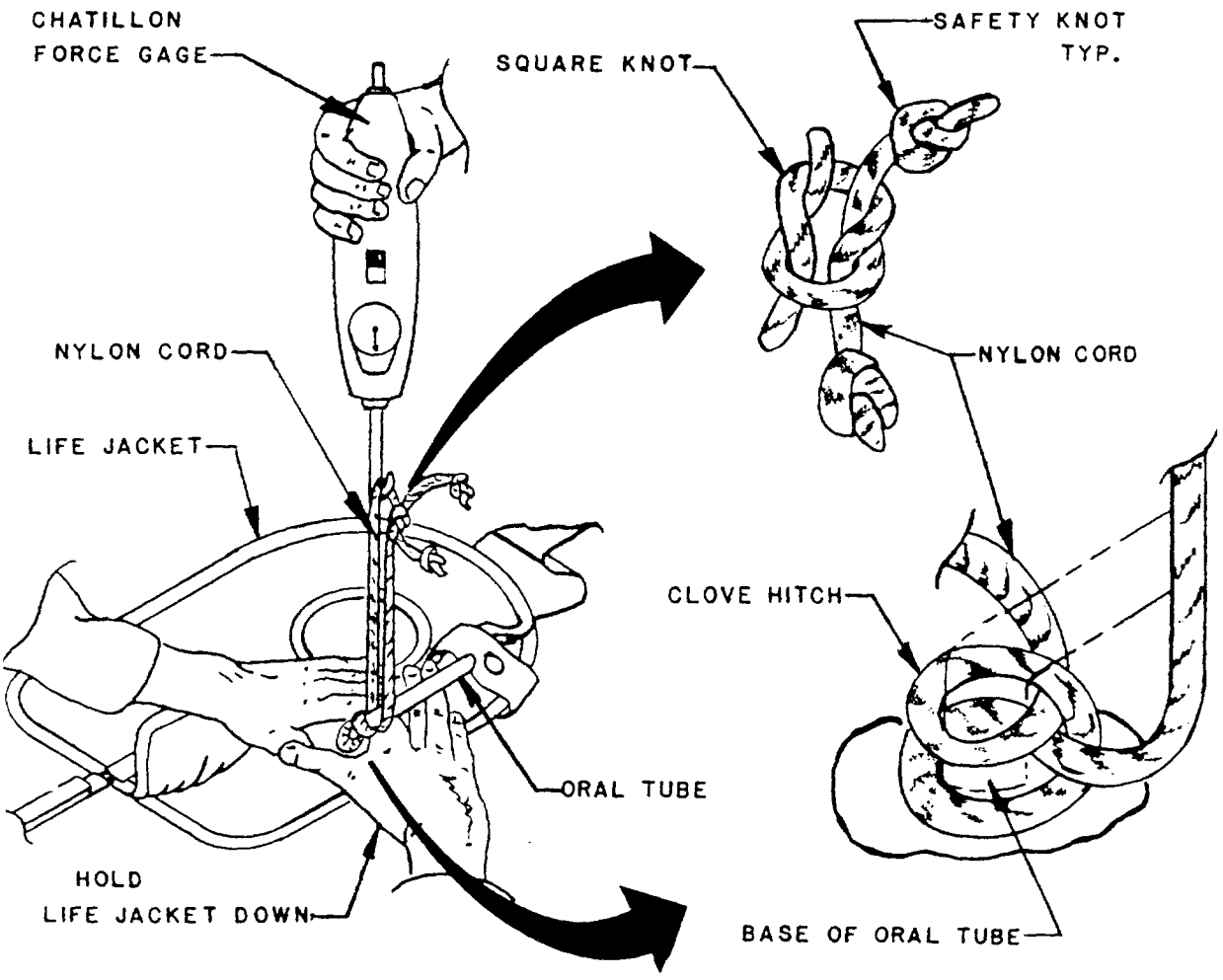
TECH	INSP	AIR CRUISER MODEL A/C-2, A/C-3, A/C-4 AND AD-8 SERIES LIFE PRESERVER INSPECTION
T		4. Inspect Sea Survivor Locator Light a. Remove tape which secures the wire lead connector plug to battery. Remove plug from battery. Examine battery case for evidence of damage and corrosion. NOTE: Life preservers manufactured after October, 1989 do not incorporate battery plugs. b. Measure battery case thickness. If more than 7/16 inch thick, replace light assembly. c. Pull battery plugs (if applicable) and examine for internal corrosion; none permissible. d. Check across battery unit pins; one megohm minimum. e. Check lamp with 1 1/2 volt battery and test probes at bottom of connector plug. If lamp does not light, replace lamp assembly. f. The shelf life of the ACR/L8 battery is 6 years. Discard if the battery will expire before the next inspection cycle. Date of manufacture _____.
T		5. Inspect Inflator Assembly Parts a. Inspect Inflator assembly parts for wear, looseness, threads clogged with foreign matter, defective threads, and damaged surfaces. b. Operate Inflator mechanism to check for proper functioning. Check pin for point and presence of rubber gasket seal in good condition. c. Inspect CO_2 cylinder for evidence of misfire and defective seal.
T		6. CO_2 cylinder weight check. a. Remove CO_2 cylinders from inflators. b. Record the gross weight stamped on the cylinder. Cylinder No. 1 _____ Cylinder No. 2 _____

TECH	INSP	AIR CRUISER MODEL A/C-2, A/C-3, A/C-4 AND AD-8 SERIES LIFE PRESERVER INSPECTION
		c. Weight-check the cylinders. If cylinder gross weight is below the minimum acceptable gross weight marked on cylinder, replace cylinder. RECORD ACTUAL WEIGHT. Cylinder No. 1 _____ Cylinder No. 2 _____
T		7. Oral Tube Tensile Test (Figure 101) * NOTE: Two people are required to perform this test. a. Deflate the life jacket. b. Tie a clove hitch around the base of the oral tube. NOTE: Nylon cord, 3/16-inch diameter approximately 24 inches long. c. Tie-off the ends of the cord to form a loop. d. Lay the life jacket out flat on a table. e. Attach force gage to the cord. f. Hold the life jacket down with two hands as shown. **CAUTION: LOAD MUST BE PERPENDICULAR "STRAIGHT UP".** g. Apply a thirty (30) lb. load (perpendicular to the surface of the life jacket cell material) to the oral tube for three seconds maximum. NOTE: If the joint between the oral tube and life jacket is not damaged, perform the Functional, Integrity and Leakage Tests.

TECH	INSP	AIR CRUISER MODEL A/C-2, A/C-3, A/C-4 AND AD-8 SERIES LIFE PRESERVER INSPECTION
T		8. Functional Test * a. With the life jacket fully assembled and deflated, discharge the CO_2 cylinders into the cells. b. If the life jacket does not "round out" to its design shape, isolate the cause. See FAULT ISOLATION, and correct the problem. c. Exhaust all CO_2 thoroughly prior to conducting the Integrity Test.
T		9. Integrity (Overpressure) Test * a. Inflate each cell with oil-water-free shop air to 4 psig for a period of not less than five minutes or more than 10 minutes. b. There shall be no evidence of fabric or seam failure. Following successful completion of this test, perform the Leakage Test.
T		10. Leakage Test * During the leakage test, record barometric pressure and temperature twice; first when life preservers are inflated, and then at the end of the time interval used for checking pressure in the life preserver cells. Cell pressure should be corrected for barometric pressure and temperature change as follows: For each 0.1 inch of mercury increase, add 0.049 psi. For each 0.1 inch of mercury decrease, sub 0.049 psi. For each 1.0 deg F temperature increase, add 0.031 psi. For each 1.0 deg F temperature decrease, sub 0.031 psi. Perform leakage test as follows: a. Inflate each cell of the life preserver through the oral tube to 4 psi from a regulated air supply. Allow 5 minutes for pressure to stabilize, and then readjust pressure to 2 psi.

TECH	INSP	AIR CRUISER MODEL A/C-2, A/C-3, A/C-4 AND AD-8 SERIES LIFE PRESERVER INSPECTION
		b. The life preserver will pass if any one of the following time leak checks is met. (Check one.) TIME INTERVAL — PRESSURE (adjusted for barometric pressure and temperature change) _____ 4 hours — 1.8 psi _____ 8 hours — 1.7 psi _____ 12 hours — 1.5 psi _____ 18 hours — 1.4 psi _____ 24 hours — 1.3 psi c. Record of leakage test. Time started: _____ Time ended: _____ BAROMETRIC PRESSURE — TEMPERATURE — PSI CELL #1 CELL #2 Start _____ _____ _____ _____ End _____ _____ _____ _____ Difference _____ _____ _____ _____ (inc/dec) (inc/dec) Correction (see chart) _____ (add/sub) _____ (add/sub) Adjust end psi for above correction: ADJUSTED PSI _____ _____ d. A life preserver with any cell that fails the leak check will be rejected and set aside to determine the cause and required repair.
T		11. Life preservers that pass the leakage test should be deflated and the CO_2 cylinders reinstalled.
T		12. Record inspection date on vest.

TECH	INSP	AIR CRUISER MODEL A/C-2, A/C-3, A/C-4 AND AD-8 SERIES LIFE PRESERVER INSPECTION
T		13. Record inspection date on AC Form 196-1 and attach to vest.
	I	14. Life vest inspection complete.



ORAL TUBE TENSILE TEST
FIGURE 101

RELATED CARDS		SURVIVAL KIT INSPECTION				CARD NUMBER
						03217
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 3

MECH	INSP	FA-1 SURVIVAL KIT INSPECTION
		Reference TI 4158. 1-25-1.
M	I	1. Check that kit contains following items. Police Whistle .....1 each MK-13 Model 0 Signal Flare .....1 each A/P 25S1 Personnel Distress Signal Kit .....1 each MK-3 Signal Mirror .....1 each SRU-16/P Minimum Survival Kit .....1 each Flashlight and Lightstick Pack .....1 each AF 64-5 Survival Manual .....1 each First Aid Kit .....1 each ACR/RT-60B or AN/PRC-106 Radio .....1 each Solar Still Kit .....1 each Duct Tape .....1 each Plastic Trash Bags .....3 each Magnifying Glass .....1 each
		INSPECTION ITEMS
M		2. Inspect police whistle and test to affirm that it is in usable condition.
M		3. Inspect MK-3 Signal Mirror for tarnish, scratches, or cracks which might reduce its reflective ability.
M		4. Test flashlight and switch for operation; remove old batteries and inspect case for corrosion and condition; install new batteries and test momentarily for operation.
M		5. Inspect lightsticks for condition and check expiration date. Replace as required.
M		6. Inspect AF64-5 Survival Manual for condition and completeness.
M		7. Inspect first aid kit for condition. NOTE: Only check contents for completeness according to itemized list inside the first aid kit if the seal on the FA-1 Survival Kit has been broken.

MECH	INSP	FA-1 SURVIVAL KIT INSPECTION
		INSPECTION ITEMS (CONT'D)
		8. Inspect MK-13 Model 0 Signal Flare in accordance with appendix A, section V, of TI 4158.1-25-1, for following defects and correct any noted.
M		a. Soldered cap detached or loose enough to fall off during normal handling.
M		b. Enough foreign matter to preclude use of signal.
M		c. Identification on signal body misleading or unidentifiable.
M		d. Excessive dents which may affect airtight seal.
M		e. D-ring missing.
M		f. Evidence of moisture.
M		g. D-ring sealed to case by paint.
		9. Inspect A/P 25S1 Personnel Distress Signal Kit in accordance with appendix A, section V, of TI 4158.1-25-1.
M		a. Main case. Inspect case for bulges, punctures, splits, obliterated markings, evidence of excessive moisture, plastic cap missing, threads stripped, excessive corrosion to primer, marking damaged but still identifiable, case corroded but not enough to preclude use, case loose in bandoleer.
M		b. Projector. Spring broken; retainer nut loose or not in place; firing pin will not slide in projector body; firing pin damaged corroded to extent that pin will not protrude through retainer nut; threads damaged or corroded to extent that case cannot be secured to projector; projector corroded but not sufficient enough to preclude use; eye bolt bent or missing.
M		10. Inspect SRU-16/P Minimum Survival Kit to ensure that outer container stitching is intact. Kits found with broken closure stitching should be inspected to ensure intermediate container has not been opened. If the intermediate container has been opened or tampered with, discard and install serviceable kit.

MECH	INSP	FA-1 SURVIVAL KIT INSPECTION
M		11. Inspect ACR/RT-60B or AN/PRC-106 radio for corrosion and obvious damage; check operation per TI 4170.31.
M		**REPACK AND RESEAL** 12. Place the items in any convenient order into the FA-1 container.
M		13. Close the FA-1 container with the nylon cord interlacing.
M		14. A wire and lead seal are required for resealing. Draw the wire taut and pass both ends through the hole in the lead seal. Press the lead seal around the wire ends until they are held firmly.
M		15. Upon completion of inspection, repackaging, and resealing of the FA-1 kit, check the item listing card to assure all items in the kit are listed.
M		16. Record inspection date on serviceable parts tag and attach to survival kit.
	I	17. FA-1 kit inspected and complete.
	I	18. Check work order for completeness.

RELATED CARDS		SURVIVAL KIT INSPECTION				CARD NUMBER
						03218
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 5

MECH	INSP	A-16 GLOBAL SURVIVAL KIT (SLED) INSPECTION
		Reference TI 4158.1-25-1

1. Inspect kit items for correct quantity and condition. Items found to be unserviceable are to be replaced with serviceable items.

MECH	INSP		QUANTITY	DESCRIPTION
M		a.	1	Container sled (A-16)
M		b.	1	Axe, hand
M		c.	3	Bags, sleeping/waterproof case
M		d.	6 pair	Boots, Mukluks
M		e.	6	Candles, wax
M		f.	1	Compass, Lensatic
M		g.	1	Cord, nylon, 50-foot
M		h.	3	Cups, drinking
M		i.	6	Drawers, winter
M		j.	3 boxes	Fire starter
M		k.	2	Flashlights (with 8 batteries and 2 bulbs)

MECH	INSP	A-16 GLOBAL SURVIVAL KIT (SLED) INSPECTION		
			QUANTITY	DESCRIPTION
		l.	4 cans	Fuel, jellied alcohol
M		m.	6	Headnets, mosquito
M		n.	1	Ice saw, snow knife
M		o.	2 cans	Insect repellent
M		p.	1	Kit, fishing
M		q.	1	Kit, first aid
M		r.	1	Kit, snake bite
M		s.	3	Knifes, hunting/sheath
M		t.	6	Goggles, ski
M		u.	4	Lipstick, anti-chap
M		v.	1	Machete (18-inch)
M		w.	1	Manual, survival
M		x.	3 boxes	Matches (75), waterproof
M		y.	6 pair	Mittens, leather winter

MECH	INSP	A-16 GLOBAL SURVIVAL KIT (SLED) INSPECTION		
			QUANTITY	DESCRIPTION
M		z.	3	Whistles, police
M		aa.	1	Plotter, navigation
M		bb.	1	Paulin, size 77
M		cc.	9	Rations, type SA
M		dd.	1	Radio, ACR/RT/60B
M		ee.	1	Radio battery, K-308A
M		ff.	1	Stone, sharpening
M		gg.	1	Signal mirror
M		hh.	1	Survival tool kit, P/N 62D4406
M		ii.	4	Signals, distress (MK-13, MOD "0")
M		jj.	3	Snares, self-locking
M		kk.	3	Soap, washing
M		ll.	6 pair	Socks, wool, cushion sole
M		mm.	3	Spoons

MECH	INSP	A-16 GLOBAL SURVIVAL KIT (SLED) INSPECTION		
			QUANTITY	DESCRIPTION
M		nn.	1	Stove, sterno
M		oo.	1 roll	Toilet tissue
M		pp.	6	Undershirts, winter
M		qq.	1 spool	Wire, brass
M		rr.	30 bags	Water, drinking, 4 ounce, USCG approved
M		ss.	3	Water, storage bags, plastic
M		tt.	2 rolls	Duct tape
M		uu.	6	Garbage bags
M		vv.	1	Solar still kit
M		ww.	6	Winter helmets (B-9)
M		xx.	2 bottles	Water purification tablets
M		yy.	1	Whiskbroom
M		zz.	4	Sunburn cream
M		aaa.	1	Magnifying glass

MECH	INSP	A-16 GLOBAL SURVIVAL KIT (SLED) INSPECTION
M		2. Repack kit as follows: a. Due to the weight generated by the components stowed in this kit, hard items shall be stowed in the bottom where they are less susceptible to damage. Fragile items shall be protected with soft goods such as underwear, gloves, etc.
M		b. After packing, install cover and reseal latches with cooper wire and lead seal.
M		3. Inspection record. Upon completion of inspection, repackaging, and resealing of the A-16 kit, record inspection date and next inspection due date on data sheet and Serviceable Parts Tag. Attach Serviceable Parts Tag to A-16 kit.
		4. Inspection complete. INSPECTOR'S SIGNATURE: _____

RELATED CARDS		SURVIVAL KIT INSPECTION				CARD NUMBER
						03219
		DATE	P/N	S/N	WORK ORDER NO.	PAGE 1 OF 2
TECH	**INSP**	**30 POUND MOD-1 KIT CHECKLIST**				
		NOTE: Designed for the Survival Shop use only.				
T		1. Three two-man tube tents. Three trash bags, check for serviceability. Two solar still kits, check for condition. Two paddles, check for condition and damage. One military survival knife. 100' of 550 parachute cord. One PRC-106 transceiver, check radio for corrosion and obvious damage. Check operation per TI4170.31. 16 water packets (2 quarts total), check for damage. Four sunglasses, check for broken lenses, bent frames, and general condition. Four emergency bags. One sam splint. One roll of duct tape, check for deterioration.				
T		2. Ultimate Survival Kit One sabre cut saw One blast match One signal mirror One jet stream emergency whistle Cubes of wet fire tinder Check survival kit container for condition and security.				
T		3. Ultimate Signal Kit Two aerial signal flares One orange smoke flare One sea dye marker Two emergency whistle One signal mirror One submersible flashlight, check flashlight for operation, remove old batteries and check for corrosion and damage. Install new batteries. One distress flap/emergency shelter One thermal blanket Three camp fire starters, check for condition and packaging. Two candles (4 hour) One canister emergency matches (10) One signal and survival guide brochure One belt pouch				

TECH	INSP	30 POUND MOD-1 KIT CHECKLIST
T		4. LSK-1 Adventure medical kit Eye glass repair kit Survival manual Two canisters of wind/water proof matches (25 per) One pair of cotton gloves 6-12 insect repellant Military issue insect repellent Check insect repellent containers for obvious damage.
T		5. LSK-2 One leatherman multi-tool Magnifying glass, check for condition. One U-Dig-It shovel One personal distress flare Wet fire tinder (2 pks) Firefly strobe light Two krill lights One lansky sharpener
T		6. LSK-3 One tube of OFF sunscreen One bottle of no-rinse bodywash Two packs of datrex survival food One compass One chapstick
T		7. Repack survival kit and replace container closure.
T		8. Seal kit with wire and lead seal.
T		9. Module-1 survival kit inspected and complete.
T		10. Check work order for completeness.

RELATED CARDS		EXPOSURE SUIT INSPECTION				CARD NUMBER
		N-	DATE		WORK ORDER NO.	03220
MECH	**INSP**	**BALEY EXPOSURE SUIT INSPECTION**				
		Reference TI 4158.1-25-1				
M		1. Remove suit from container.				
M M M		2. Inspect suit as follows: a. Inspect fabric for deterioration and damage. b. Inspect for moisture or mildew damage. c. Check that rubber self-inflating valve is functional.				
M		3. Insert suit into container.				
* M		4. Upon completion of inspection and repacking, record inspection date on AC Form 196-1. Install in the outer pocket provided.				

RELATED CARDS		ARCTIC KIT INSPECTION				CARD NUMBER
						03221
		N-	DATE		WORK ORDER NO.	
MECH	**INSP**	**MODULE-1 ARCTIC CLOTHING KIT INSPECTION**				
		Reference TI 4158.1-25-1				
M		1. Remove Arctic clothing kits from the container.				
M ____ M	 ____	2. Inspect Arctic clothing kits as follows: a. Inspect kit container for moisture or mildew damage. b. Inspect kit container fabric for cuts, tears or deterioration that would indicate damage to the clothing.				
* M *		3. Replace and reseal.				
M		4. Upon completion of inspection, repackaging, and resealing of the Module-1 Arctic Kit, place AC Form 4100-196-1 in the card holder. Record inspection date on data card and serviceable parts tag. Replace inspection card in the card holder.				

RELATED CARDS		EVACUATION SLIDE INSPECTION				CARD NUMBER
						03224
		DATE	S/N	P/N	WORK ORDER NO.	PAGE 1 OF 5

MECH	INSP	B-727 AIR CRUISER EVACUATION SLIDE P/N 15D22129
		NOTE: Items marked with an * are only required on the functional check.
		Check type of inspection — General Inspection ☐ Functional Check ☐
		* NOTE: Perform overpressure test as part of every scheduled maintenance check. Perform an inflatable leakage test prior to every repack of the system.
		Reference TI 4158.1-25-8.
		1. Overpressure test.
M		* a. Install relief valve locking tool P/N D19747-101.
M		* b. Hold the jet pump flapper valves open; position shop air nozzle approximately 3 to 4 inches away from the jet pump (flapper valve); add air until the inflatable inflates (rounds out) to design shape. Allow jet pump flapper valves to close (figure 1).

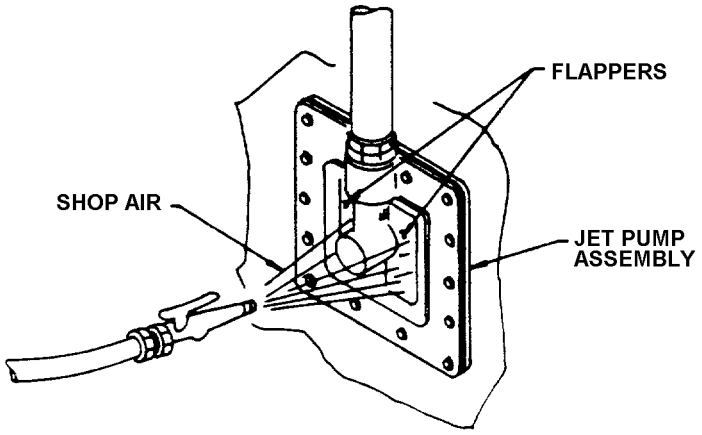


Figure 1. Integrity Verification Test

M		* c. Attach air line to mattress valve and increase tube pressure to 3.7 psig.
M		* d. Record inflatable pressure and time. Pressure: _____ Time: _____

MECH	INSP	B-727 AIR CRUISER EVACUATION SLIDE P/N 15D22129
M		* e. Allow assembly to stand undisturbed for a time interval of 5 minutes. There shall be no evidence of construction or material failure. All seams and accessories shall remain intact and show no evidence of separation.
_____	_____	_____
M		* f. At end of test interval, measure and record inflatable pressure. Pressure shall not be less than 3.25 psig. Pressure: _____ Time: _____
_____	_____	_____
M		* g. Deflate the inflatable.
_____	_____	_____
M		* h. Remove relief valve locking tool from relief valve.
		2. Leakage test. Perform leakage test after overpressure test or any repair which would have an effect on air retention capabilities.
M		* a. Hold jet pump flapper valves open; position air nozzle approximately 3 to 4 inches away from the jet pump inlet (flapper valve). Add air until slide inflates to design shape. Allow jet pump flapper valves to close.
_____	_____	_____
M		* b. Attach air line to mattress valve and inflate until relief valve opens. The valve should open at 2.25 to 2.55 psig. Record valve OPEN pressure: _____ The valve should close at 2.10 to 2.45 psig. Record valve CLOSE pressure: _____ If valve operates improperly, refer to TI 4158.1-25-8 for repair or replacement.
_____	_____	_____
M		* c. Adjust air pressure in slide to 2.0 psig and allow to stabilize for 1 hour.
_____	_____	_____
M		* d. After 1 hour, check and readjust pressure to 2.0 psig, if necessary.
_____	_____	_____
M		* e. Check jet pump for leaks by applying leak test solution to the surfaces of the flapper valves and the screw heads around edges of valve plate. Refer to TI 4158.1-25-8 for repair.

MECH	INSP	B-727 AIR CRUISER EVACUATION SLIDE P/N 15D22129
M		* f. Check mattress valve for leaks by applying leak test solution at mounting patch to slide attachment location. If bubbles indicate leak, slide assembly must be returned to factory for replacement of valve base.
M		* g. Record slide pressure, temperature, barometric pressure, and time on chart.
M	I	* h. Allow assembly to stand undisturbed for desired test interval (4 hours minimum), then again record slide pressure, temperature, barometric pressure, and time. Minimum permissible slide pressure is shown in figure 2 after correction for temperature and pressure variations (1.5 psig for 4-hour test). For each 1.0 deg F temperature, increase add 0.03 psig. For each 1.0 deg F temperature, decrease sub 0.03 psig. For each 0.1 inch of mercury, increase add 0.05 psig. For each 0.1 inch of mercury, decrease sub 0.05 psig. Time Started: _____ Time Ended: _____ BAROMETRIC PRESSURE / TEMPERATURE / SLIDE PRESSURE Start _____ _____ _____ End _____ _____ _____ Difference _____ _____ _____ Correction _____ + _____ = _____ Adjust end psi for above correction _____
M		* i. If corrected pressure falls below specified limits, reinflate to relief valve opening pressure. Check jet pump, mattress valve, and relief valve for leaks. Then check inflatable for leaks by swabbing the tubes with leak solution using a soft brush.
M		3. Inspect slide for cuts, chaffing, frayed cordage, and general condition.

MECH	INSP	B-727 AIR CRUISER EVACUATION SLIDE P/N 15D22129
		4. Accomplish cylinder inspection as follows:
M		a. Check cylinder hydrostatic test due date. Cylinder hydrostatic test due every 5 years. Date of last hydrostatic test is stamped on cylinder shoulder.
_____	_____	_____
M		b. Replace cylinder if less than 12 mos. is remaining on the hydrostatic test due date.
_____	_____	_____
M		c. Inspect cylinders for evidence of wear, corrosion, dents or other obvious defects. Replace defective cylinders.
_____	_____	_____
M		d. Inspect valve assembly for evidence of corrosion, condition and security.
_____	_____	_____
M		e. Weigh inflation assemblies. If weight is not the same as gross weight marked on cylinder, replace.
_____	_____	_____
M		f. Record cylinder serial numbers and hydro test date. Cyl S/N _____ Hydro Test Date _____
M		5. Repack the slide chute assembly per folding diagrams in TI 4158.1-25-8.
	I	6. Inspect work order for completeness.
	I	7. Escape slide inspection complete.

B-727 AIR CRUISER EVACUATION SLIDE P/N 15D22129

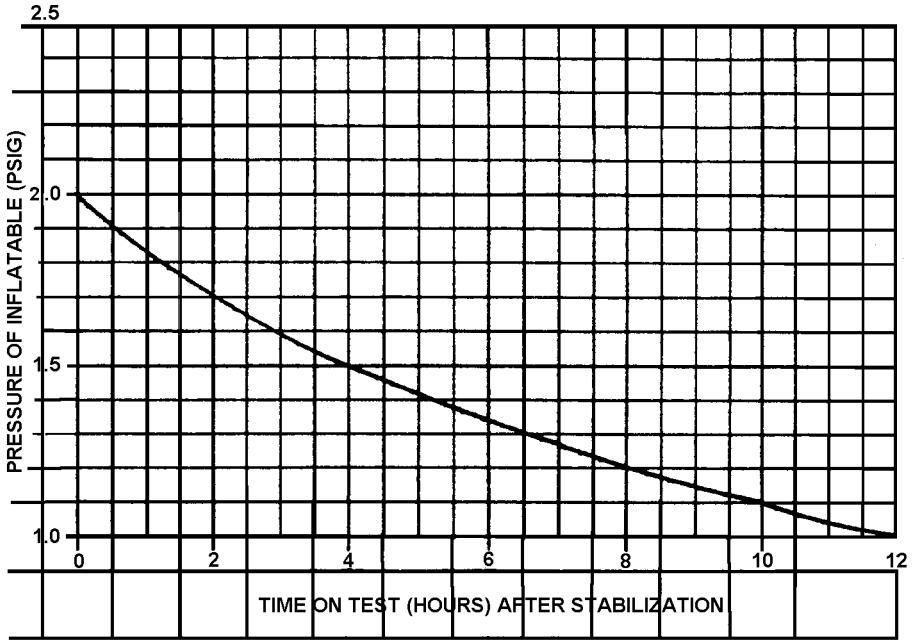


Figure 2. Minimum Allowable Slide Pressure vs Test Duration